

# PATENT ABSTRACTS OF JAPAN

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(71)Applicant : **SAMSUNG SDI CO LTD**

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(72)Inventor : **KEN JUNKI  
KIN JUNKI  
SHIN TOTETSU  
AN JUNKAN  
RYU KANSEI  
RI TEIKEN**

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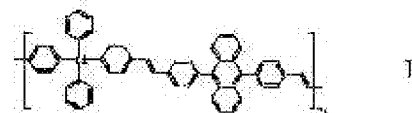
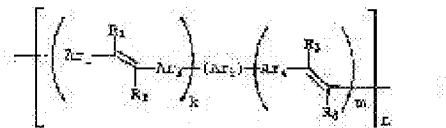
## (54) LUMINESCENT COMPOUND AND DISPLAY ELEMENT EMPLOYING THIS AS COLORING MATERIAL

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a blue luminescent compound excellent in a luminous efficiency characteristic by including a condensed aromatic ring in the luminescent compound.

**SOLUTION:** The luminescent compound is expressed by an expression I {where, Ar1, Ar2, and Ar4 are each chemically bonded, substituted, or non- substituted phenyl, naphthalene, anthracene, or the like, Ar3 is a non-substituted or substituted condensed aromatic ring such as naphthalene, anthracene, diphenylanthracene, phenanthrene, or the like, R1, R2, R3, and R4 are each hydrogen, an ethyleneoxy group, an alkyl group, an alkyoxy group, or the like (k) and (m) are 0 or 1, n is an integer 10 to 200}.

Preferably, the molecular weight of the compound of the expression I is  $5 \times 10^3$  to  $2 \times 10^5$  and this is used for an organic film, especially as material for forming a luminescence layer and a hole carrier layer. For example, an expression II (where, n1 is 10 to 200) is used. A hole carrier layer is formed on an anode electrode, a luminescent layer is formed thereon by spin-coating it with the compound of the expression I, and further a cathode is formed thereon, thus an organic EL element is completed.



## LEGAL STATUS

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